

ABSTRACT

A system for identifying service affecting conditions on a subscriber line in the access portion of a broadband network, particularly an ADSL network. A measurement unit provides information on the line that aids in identifying projected performance. Information from a modem on the subscriber line indicative of actual performance is obtained and compared to the predicted values. Deviations are used to identify service affecting conditions and, depending on the nature of the deviations, the type of condition affecting service on the line. The physical measurements are used to identify the length of the subscriber line. Modem information is obtained through the MIB and allows determination of the bit loading on the line. Interference sources are identified by comparing the actual bit loading to bit loading expected for a line corresponding to the measured length.